Claim Amendments

Please amend claims 1, 17, and 20 as follows:

Listing of Claims

1. (currently amended) A primer tank for generating a primer vapor for treating a substrate with reduced primer droplet formation comprising:

a tank body for containing a liquid primer to form a[[n]] planar exposed surface of said liquid primer, said exposed surface comprising a liquid vapor interface; and,

a nozzle assembly comprising a nozzle plate, said nozzle plate comprising a plurality of openings, said plurality of openings disposed above said exposed surface and arranged for directing a plurality of gas streams onto said exposed surface to form said primer vapor in a vapor collection space above said liquid vapor interface.

2. (previously presented) The primer tank of claim 1 wherein said nozzle assembly further comprises:

a gas inlet pipe for receiving a primary gas stream and said nozzle plate provided in downstream fluid communication with said gas inlet pipe;

wherein said nozzle plate comprises said plurality of openings for dividing said primary stream into said plurality of gas streams.

3. (original) The primer tank of claim 1 further comprising a level sensor provided in said tank body for sensing a level of the liquid primer in said tank body.

4. cancelled

5. (previously presented) The primer tank of claim 1 further comprising a vapor outlet for distributing the primer vapor from said vapor collection space to a downstream process.

6. cancelled

7. cancelled

8. cancelled

9. (currently amended) A primer tank for generating a primer vapor for treating a substrate, comprising:

a tank body for containing a liquid primer to form a[[n]] planar exposed surface of said liquid primer; and,

a nozzle assembly provided in said tank body, said nozzle assembly having a gas inlet pipe for receiving a primary gas stream; a housing having a housing interior provided in fluid communication with said gas inlet pipe; and a nozzle plate in downstream fluid communication with said housing, said nozzle plate having plurality of openings for receiving the primary gas stream and ejecting a plurality of secondary gas streams onto said exposed surface of said liquid primer to create a primer vapor in a vapor collection space above said exposed surface.

10. (original) The primer tank of claim 9 further comprising a level sensor provided in said tank body for sensing a level of the liquid primer in said tank body.

11. (original) The primer tank of claim 9 further comprising a vapor outlet tube provided in fluid communication with said tank body for distributing the primer vapor from said tank body.

12. cancelled

13. (previously presented) The primer tank of claim 9 wherein said plurality of openings are arranged in a plurality of radially-extending rows on a plate surface of said nozzle plate, said plate surface arranged above said exposed surface.

14. cancelled

15. cancelled.

16. cancelled.

17. (currently amended) A method of generating a primer vapor from a liquid primer for treating a substrate to reduce primer vapor droplet formation comprising the steps of:

providing a primer tank having a tank body;

providing the liquid primer in said tank body to form a[[n]] planar exposed surface of said liquid primer, said exposed surface comprising a liquid vapor interface;

directing an inert gas comprising a plurality of gas streams formed from a nozzle plate comprising a plurality of openings

onto said exposed surface to form a vapor above said liquid vapor interface, said vapor comprising said liquid primer and said inert gas; and,

transferring said vapor to a downstream process.

18. (original) The method of claim 17 wherein said liquid primer comprises hexamethyldisilazone.

19. (previously presented) The method of claim 17 wherein said plurality of gas streams are directed onto said exposed surface at subatmospheric pressures.

20. (currently amended) The method of claim 17 wherein the step of directing comprises:

providing a primary gas stream;

dividing said primary gas stream into said plurality of gas streams according to said plurality of openings, said plurality of openings disposed above said exposed surface; and,

directing said plurality of gas streams against said exposed

surface and collecting said vapor in a vapor collection space disposed above the vapor liquid interface.

21. (previously presented) The method of claim 20, wherein said plurality of openings are arranged in a plurality of radially-extending rows on said nozzle plate surface.

22. (previously presented) The method of claim 17, wherein said inert gas comprises nitrogen.

23. (previously presented) The method of claim 17, wherein said downstream process comprises treating a semiconductor process wafer with the primer vapor, said downstream process at a relatively lower pressure than the vapor collection space.

24. (previously presented) The primer tank of claim 5, wherein said downstream process is maintained at a lower pressure relative to said vapor collection space.

25. (previously presented) The primer tank of claim 1 wherein said plurality of openings are arranged in a plurality of radially-extending rows on said nozzle plate surface.